Change or Observe?

Sort psychology research by what the researcher does.

PS.1 "Examine the foundations of psychology and its origins as an empirical science. Analyze the context and origins of psychology including the major approaches to psychology (e.g., cognitive-behavioral, psychoanalytic…"

NAME _____ DATE _____

EXPERIMENTAL RESEARCH

The researcher changes a condition and measures its effect. Random assignment helps make the groups comparable.

A psychologist randomly assigns volunteers to drink one or two cups of water, then compares their balance scores.

NONEXPERIMENTAL RESEARCH

The researcher gathers information without changing the conditions being studied. This can reveal patterns, but it cannot show that one factor caused another.

A psychologist reads archived letters to identify descriptions of homesickness.

1 SORT

8 items

Circle EXPERIMENT or OBSERVE for each item, then choose two items and explain the clue that helped you sort each one.

1.	1. A psychologist counts how often bus riders offer their seats to others without intervening.	EXPERIMENT OBSERVE
2.	2. Researchers randomly assign volunteers to dim or bright lighting, then compare reading speed.	EXPERIMENT OBSERVE
3.	3. Researchers randomly assign participants to a scented or unscented space, then give them a memory test.	EXPERIMENT OBSERVE
4.	4. A counselor reviews one patient's interviews to describe patterns in anxiety.	EXPERIMENT OBSERVE
5.	5. Researchers randomly assign students to use flashcards or reread notes, then compare quiz scores.	EXPERIMENT OBSERVE
6.	6. A survey asks adults about commute length and stress levels without changing either.	EXPERIMENT OBSERVE
7.	7. Researchers randomly assign workers to standing or seated desks, then compare reports of back pain.	EXPERIMENT OBSERVE
8.	8. Researchers randomly assign volunteers to use a paper map or a navigation app, then measure travel time.	EXPERIMENT OBSERVE

2 PROVE IT

Explain your thinking

Pick two items from Part 1. For each one, tell how you knew where it belonged.

ITEM # _____ **HOW I KNEW** _____

ITEM # _____ **HOW I KNEW** _____

3 MAKE YOUR OWN

One of each

Write one new example of experimental research and one new example of nonexperimental research.

EXPERIMENT _____

OBSERVE _____

CHALLENGE

Write one research question, describe an experimental and a nonexperimental way to study it, and state which method could support a cause-and-effect claim.

Change or Observe?

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	1. A psychologist counts how often bus riders offer their seats to others without intervening.	**OBSERVE**	The psychologist records behavior without changing a condition.
2	2. Researchers randomly assign volunteers to dim or bright lighting, then compare reading speed.	**EXPERIMENT**	Researchers set the lighting condition and measure its effect.
3	3. Researchers randomly assign participants to a scented or unscented space, then give them a memory test.	**EXPERIMENT**	Researchers change the scent condition and measure memory.
4	4. A counselor reviews one patient's interviews to describe patterns in anxiety.	**OBSERVE**	The counselor examines existing information without changing a condition.
5	5. Researchers randomly assign students to use flashcards or reread notes, then compare quiz scores.	**EXPERIMENT**	Researchers assign study methods and measure quiz performance.
6	6. A survey asks adults about commute length and stress levels without changing either.	**OBSERVE**	The survey measures two factors without changing them.
7	7. Researchers randomly assign workers to standing or seated desks, then compare reports of back pain.	**EXPERIMENT**	Researchers assign desk types and measure reported pain.
8	8. Researchers randomly assign volunteers to use a paper map or a navigation app, then measure travel time.	**EXPERIMENT**	Researchers assign navigation methods and measure travel time.

PART 2 · PROVE IT

Accept any explanation that names the deciding feature from the rule box for the chosen item.

PART 3 · MAKE YOUR OWN (SAMPLE ANSWERS)

- **EXPERIMENT**: Randomly assign participants to take a break or keep working, then compare their accuracy on a sorting task.
- **OBSERVE**: Count how often people check their phones while waiting at a train station, without intervening.

Challenge: Question: Does music affect typing speed? Experiment: Randomly assign people to type with or without music and compare their speeds. Nonexperimental study: Ask people about their usual music habits and typing speed. The experiment could support a cause-and-effect claim because the researcher changes the music condition.

For Part 2, acceptable explanations identify whether the researcher changed a condition. For example, item 1 only records behavior, while item 2 assigns different lighting conditions.